

A NEW SPECIES OF *CENTAURIUM* (GENTIANACEAE) FROM TRANS-PECOS TEXAS

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ABSTRACT

Centaurium blumbergianum B.L. Turner, sp. nov. is described from near Ruidosa, Presidio Co. Texas. It is a perennial species with broad open cymes having no obvious close relatives among the North American taxa described to date. It occurs only along saline streams and in seeps at the base of limestone walls in dead-end canyons where it grows with or near a number of other rare taxa such as the recently described localized endemic, *Arida mattturneri* and the equally rare *A. gypsitherma* (cf. Sida 20 [4]). Photographs of type material are presented, along with an account of its possible relationships to other taxa.

RESUMEN

Se describe *Centaurium blumbergianum* B.L. Turner, sp. nov., de cerca de Ruidosa, Presidio Co., Texas. Es una especie perenne con cimbras abiertas anchas, que no tiene parientes próximos entre los taxa norteamericanos descritos hasta ahora. Ocurre solamente a lo largo de torrentes salinos y en filtrados de la base de paredones calcáreos de los finales ciegos de cañones donde crece junto o cerca de cierto número de otros taxa raros tales como el endemismo descrito recientemente, *Arida mattturneri* y la igualmente rara *A. gypsitherma* (cf. Sida 20 [4]). Se presentan fotografías del material tipo, junto con una relación de su posible parentesco con otros taxa.

Centaurium blumbergianum B.L. Turner, sp. nov. (Figs. 1, 2). TYPE: U.S.A. TEXAS: Presidio Co., ca. 2.2 mi NNW of Ruidosa in "Blumberg Canyon," growing along sulphur streams and about tinajas, 26 Jul 2003, Matt W. Turner 101 (HOLOTYPE: TEX; ISOTYPES: MO, SRSC).

Simile *Centaurio tenuifolio* (Mart. & Gal.) B.L. Rob. sed habens petala parviora pallidaque et inflorescentiam expansiorum cum flores pauciores.

Perennial tufted herbs to 40 cm high. **Stems** 4-sided, 1-2 mm across, their edges adorned with minute, somewhat scabrous ridges, otherwise glabrous or nearly so. **Leaves** opposite throughout, linear, glabrous, those at mid-stem mostly 15-25 mm long, 0.4-0.6 mm wide. **Flowers** 3-15 per stem, forming an open cyme up to 20 cm across, the pedicels mostly 1.5-3.0 cm long. **Sepals** 5, linear-lanceolate, 7-10 mm long, united at their base for ca. 1 mm; apices slender and narrowly apiculate. **Corollas** pink; tubes 7-9 mm long, becoming transparent at maturity, constricted just below the 5 lobes, the latter 8-9 mm long, 3.5-4.5 mm wide. **Stamens** 5, exerted from tube for 2-3 mm, the anthers ca. 3 mm long at first, but 2-3 mm long and markedly helical at full anthesis. Style exerted from the tube for ca. 4 mm, the stigma somewhat bilobed, ca. 0.5 mm across. **Capsules**



PLANTS OF TEXAS

Gentianaceae

Centaurium blumbergianum B. L. Turner, sp. nov.

Det. B. L. Turner

PRESIDIO COUNTY, ca. 2.2 miles NNE of Blumberg in Blumberg Canyon, growing along perennial talpaz streams and about houses.

FIRST RECORDED IN TEXAS

30° 01' 45" N, 100° 44' W

Matt. W. Turner 101

28 Jul 2001

The University of Texas Herbarium (TEX)

A.L.

FIG. 1. *Centaurium blumbergianum*; holotype (M. W. Turner 101, TEX).



FIG. 2. *Centaurium blumbergianum*, type material (upper); close up of corolla (lower).

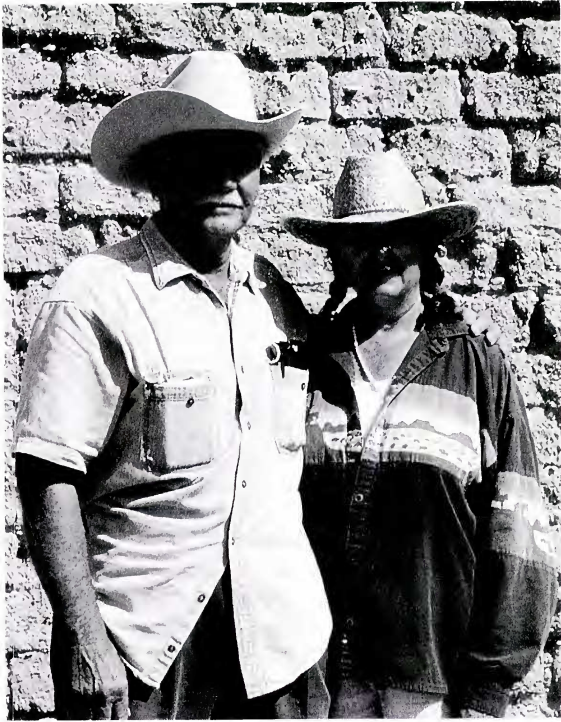


FIG. 3. James and Olivia Blumberg.

bivalvate, narrowly oval, 8–10 mm long, ca. 3 mm across; ovules numerous to each carpel. **Seeds** ovoid, brown, ca. 0.6 mm long, 0.4 mm wide, at maturity sculpted with a peanut-like raised reticulum.

Among the Texas species, *C. blumbergianum* has no close relatives, although an anonymous reviewer suggests that it might be compared favorably with *C.*

multicaule B.L. Rob., a rather small annual with broadly lanceolate to oblanceolate basal leaves. In contrast, *C. blumbergianum* is a relatively robust perennial with persistent linear basal leaves.

In her treatment of the Mexican and Central American species of *Centaurium* by Broome (1974), *C. blumbergianum* will key to or near *C. brachycalyx* Standl. & L.O. Williams, a species of southern Mexico and Central America. It differs from the latter in numerous characters, including habit, inflorescence, and leaf shape. Except for its small flowers and expanded inflorescence, *C. blumbergianum* would appear to be closest to *C. tenuifolium* (Mart. & Gal.) B.L. Rob., a taxon confined to the mountains of western Mexico (Nayarit to Guerrero).

Among the species of *Centaurium* in the U.S.A. it most closely approaches *Centaurium namophilum* Reveal, Broome & Beatley, a localized species of Nye Co., Nevada and closely adjacent California; *C. blumbergianum* differs in having a more robust perennial habit and much more diffuse inflorescence. *Centaurium namophilum* and the closely related *C. tricanthum* (Greisb.) B.L. Rob. (according to Reveal et al. 1974), are said to "occur near or along stream drainages, marshy places or on alkaline soil." Such habitats also house *C. blumbergianum*.

Etymology.—It is a pleasure to name this remarkable new species for Mr. James Blumberg and his wife Olivia (Fig. 3), residents of Ruidosa, Texas. They own the property concerned and Mr. Blumberg eagerly accompanied Matt Turner and myself in our efforts to collect type material.

ACKNOWLEDGMENTS

I am grateful to James Blumberg for permission to visit the site concerned and to my wife Gayle for the Latin diagnosis. A special thanks to Robert Harms for helping "upgrade" the picture of the Blumbergs. James Reveal and an anonymous reviewer made helpful suggestions.

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